

IN THE CLAIMS

1. (currently amended) A method for forming a network including a plurality of communication devices, a wire network for allowing a plurality of communication transmissions between the communications devices, and at least one connectivity device connected to the wire network, said method comprising the steps of:

utilizing the connectivity device to regenerate a communication signal such that the distance between the communications device is extended;

utilizing the connectivity device to route communication transmissions by the communications devices through the wire network; and

communicating, by a central processing unit located within the connectivity device, with a network hub device located within the connectivity device, a network repeater device located within the connectivity device, and a network switch device located within the connectivity device, wherein the network repeater device configured to amplify the communication signal to extend the distance between the communications devices, the network hub device interconnects the communication devices by bringing segments of the wire network together, and the network switch device reduces communication collisions by providing communication transmissions from the communications devices with independent paths through the wire network.

2. (previously presented) A method in accordance with Claim 1 further comprising the steps of:

connecting one of the connectivity devices to a communications device; and

connecting the communications device to the wire network utilizing the connectivity device.

3. (currently amended) A method in accordance with Claim 1 further comprising the step of configuring the network to include at least one of the network

hub device, the network switch device, ~~a network~~the network repeater device and a network router device.

4. (original) A method in accordance with Claim 1 further comprising the step of utilizing the connectivity device in a wire network having a topology of at least one of a daisy-chain configuration, a ring configuration, and a star configuration.

5. (original) A method in accordance with Claim 1 further comprising the step of utilizing the connectivity device to enable Single Point of Connect (SPOC) capability within the network.

6. (original) A method in accordance with Claim 1 further comprising the step of utilizing the connectivity device as at least one of a network fault tolerant device and a network fault tolerant management device.

7. (currently amended) A network system comprising:  
  
a plurality of communications devices configured to communicate with each other;

a wire network configured to interconnect said communications devices and allow a plurality of communication transmissions between said communication devices;

a network connectivity device connected to said wire network, said connectivity device comprising a network repeater device and configured to:

~~amplify communication transmissions such that the distance between said communications device is extended; and~~

route communication transmissions through said wire network; and

a central processing unit located within said network connectivity device and configured to communicate with a network hub device located within said network connectivity device, said network repeater device, and a network switch device located within said network connectivity device, wherein said network repeater device configured to amplify communication transmissions to extend a distance between said

communications devices, said network hub device configured to interconnect said communication devices by bringing segments of said wire network together, and said network switch device configured to reduce communication collisions by providing communication transmissions from said communications devices with independent paths through said wire network.

8. (original) A system in accordance with Claim 7 wherein each said communication device is connected to said wire network using one of said network connectivity devices.

9. (currently amended) A system in accordance with Claim 7 wherein said network system further comprises at least one of the network hub device, the network switch device, ~~a network~~the network repeater device, and a network router device.

10. (original) A system in accordance with Claim 7 wherein said wire network comprises a means suitable for carrying data and communication transmissions.

11. (original) A system in accordance with Claim 7 wherein said connectivity device configured to operate when said wire network uses a topology of at least one of a daisy-chain configuration, a ring configuration, and a star configuration.

12. (original) A system in accordance with Claim 7 wherein said connectivity device further configured to enable SPOC capability within said network system.

13. (original) A system in accordance with Claim 7 wherein said connectivity device further configured to function as at least one of a network fault tolerant device and a network fault management device.

14. (currently amended) A network connectivity device comprising a central processing unit connected to a electronic storage device, a hub module, a switch module, a repeater module and a router module, said connectivity device

connected to a wire network interconnecting a plurality of communication devices, said connectivity device configured to:

~~utilize said repeater module to amplify communication transmissions such that the distance between the communications devices is extended; and~~

utilize said router module to route communication transmissions through the wire network, wherein said connectivity device includes a central processing unit configured to communicate with said hub module located within said connectivity device, said repeater module located within said connectivity device, and said switch module located within said connectivity device, said repeater module configured to amplify communication transmissions to extend a distance between the communications devices, said hub module configured to bring segments of the wire network together, and said switch module configured to reduce communication collisions by providing communication transmissions from the communications devices with independent paths through the wire network.

15. (original) A network connectivity device in accordance with Claim 14 further configured to connect at least one communication device to a wire network.

16. (original) A network connectivity device in accordance with Claim 14 further configured to function in a network system comprising at least one of a network hub, a network switch, a network repeater, and a network router.

17. (original) A network connectivity device in accordance with Claim 14 further configured to function in a network system having a topology comprising at least one of a daisy-chain configuration, a ring configuration and a star configuration.

18. (original) A network connectivity device in accordance with Claim 14 further configured to be at least one of a network fault tolerant device and a network fault tolerant management device.

19. (original) A network connectivity device in accordance with Claim 14 further configured to enable SPOC capabilities with a network system.

20. (original) A network connectivity device in accordance with Claim 14 wherein said connectivity device is a network node utilized in a communications network system comprising a plurality of communications devices interconnected by a wire network.